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Amendments to the Claims

1.7 (canceled).

8 (currently amended). The material of claim 7, A material in the form of particles. the particles comprising a silica base particle and one or more ZrO2 or TiO2 coating layers deposited by an atomic layer deposition process on the surface of said base particle, wherein the particles have a predetermined refractive index greater than that of silica alone, an average diameter of from 10 to 150 nanometers, at least one TiO2 layer deposited by an atomic layer deposition process upon the silica base particle and wherein at least one SiO2 layer deposited by an atomic layer deposition process is present upon the surface of the TiO2 layer, wherein the material has a refractive index of 1.48 to 1.60.

9 (currently amended). The material of claim 7, A material in the form of particles, the particles comprising a silica base particle and one or more ZrO2 or TiO2 coating layers deposited by an atomic layer deposition process on the surface of said base particle, wherein the particles have a predetermined refractive index greater than that of silica alone, an average diameter of from 10 to 150 nanometers, at least one TiO2 layer deposited by an atomic layer deposition process upon the silica base particle and wherein at least one ZrO2 layer deposited by an atomic layer deposition process is present upon the surface of a TiO2 layer, wherein the material has a refractive index of 1.48 to 1.60.

10 (original). The material of claim 9 wherein at least one SiO2 layer deposited by an atomic layer deposition process is present upon the surface of the ZrO2 layer.

11-13 (canceled).

14 (currently amended). The eurable dental composite material of claim 13 wherein A curable dental composite material comprising a photocurable polymeric resin and a particulate filler material, wherein the particulate filler material is a material having a refractive index in the range of about 1.50 to about 1.58 and an average diameter of up to about 350 nanometers, the filler material comprising a silica base particle having an average diameter of up to about 300 10/773,685

nanometers containing at least one ZrO₂ or TiO₂ layer deposited by an atomic layer deposition process, wherein the particle has a predetermined refractive index greater than that of silica alone and the refractive index of the particles is within 0.01 unit of the refractive index of the resin.

15 (original). The curable dental composite material of claim 14, wherein the particles have at least one SiO₂ layer deposited by an atomic layer deposition process upon the surface of a ZrO₂ or TiO₂ layer.

16 (original). The curable dental composite material of claim 14, wherein the particles have at least one TiO₂ layer deposited by an atomic layer deposition process upon the silica base particle.

17 (original). The curable dental composite material of claim 16, wherein the particles have at least one ZrO₂ layer deposited by an atomic layer deposition process upon the surface of a TiO₂ layer.

18 (original). The curable dental composite material of claim 14 wherein the resin is a diglycidylmethacrylate of bisphenol A (BIS-GMA), dodecanediol dimethacylate, ethyoxylated bisphenol A dimethacrylate, triethyleneglycol dimethacrylate (TEGDMA), urethane dimethacrylate (UDMA), fluorinated monomeric or oligomeric urethane acrylate or a spiroorthocarbonate monomers or oligomers.

19-24 (canceled).

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